

Summary of June 9, 2011 Antidegradation Meeting with Environmental Coalition

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Dear Martha, Bruno, Steve, and Dave:

Thank you once again for meeting with us on June 9th to discuss the May 6, 2011 draft of the Indiana antidegradation rule that is slated for preliminary adoption at the July 27th meeting of the Water Pollution Control Board. We appreciate the good discussion we were able to have about the environmental community's main remaining questions and concerns about the current draft of the rule. We hope that this summary of our discussion will help us continue the conversation about revisions or clarifications that could help expedite the remaining steps in this rulemaking process and improve the chances for U.S. EPA's approval of the final rule.

The following were in attendance at the meeting:

In person:

Martha Clark Mettler – IDEM
Bruno Pigott – IDEM
Steve Roush – IDEM
Dave Wagner – Water Pollution Control Board

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Brad Klein – ELPC
Dick Miller – Sierra Club
Bowden Quinn – Sierra Club
Jeff Hyman – Conservation Law Center

On the phone:

Tim Maloney – Hoosier Environmental Council
Lyman Welch – Alliance for the Great Lakes
Nicole Barker – Save the Dunes
Barbara Sha Cox – Indiana CAFO Watch

DISCUSSION ITEM 1. MEANING OF “REGULATED POLLUTANT”: DRAFT SECTION 1 AND SECTION 2(43).

The “trigger” for an antidegradation review is whether or not there will be a new or increased loading of a “regulated pollutant” as defined by the rule. There have been extended discussions of how to define the trigger throughout this rulemaking process. (In prior drafts they were called “pollutants of concern.”) From our prior discussions, we understood that “pollutants of concern” would include any pollutants that could have a potentially detrimental effect on the designated or existing uses of a water if discharged in sufficient amounts.

During the meeting, we asked whether the change from “pollutant of concern” to “regulated pollutant” in the new draft rule had implications for the coverage of pollutants by the antidegradation rule. You stated that IDEM’s intent was not to narrow the scope of pollutants covered by the antidegradation rule. You pointed out that key language in the definition of “regulated pollutant” is in Section 2(43)(B), which states that a regulated pollutant includes “any other parameter that may be limited in an NPDES permit.” You highlighted that this definition is broader than currently limited parameters in existing NPDES permits, and includes any parameter that “may” be limited in “an” NPDES permit.

You also pointed out that at one end of the spectrum, there are substances for which very little information exists on potential harmful effects, and those substances are not going to be limited in any NPDES permit until more data are available. Those substances are thus not “regulated pollutants.” At the other end of the spectrum are those pollutants currently limited in existing NPDES permits, which are clearly covered by the definition of “regulated pollutant.” In between are substances for which we have information about harmful effects and for which we can rationally develop a permit limit, but which are not currently limited in existing permits. Once IDEM is aware of the pollutants an antidegradation applicant plans to discharge (if the antidegradation applicant already holds an NPDES permit, the applicant/permit holder has a duty to disclose new substances in its discharge), IDEM has an opportunity to develop a permit limit for that substance. A weakness in this process, however, may be in IDEM’s process for developing new permit limits for newly regulated pollutants.

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As discussed at length in the stakeholder process, it is important to remember that the threshold for requiring an antidegradation review for a regulated pollutant is lower than the “reasonable potential to exceed criteria” method that is typically used as the threshold for establishing WQBEL’s. That is because antidegradation review is intended to protect the *assimilative capacity* of the water body, which by definition is the increment of water quality that is better than the criteria.

Takeaways:

- In guidance, IDEM should clarify its intent to use its “best professional judgment” to require antidegradation reviews for new or emerging pollutants present in a discharge where the scientific literature indicates that the pollutant has the potential to adversely affect aquatic life, recreation, or other designated or existing uses of a waterbody.
- In guidance, IDEM should clarify that the trigger for consideration as a “regulated pollutant” for the purposes of antidegradation review is not limited to those pollutants that have been determined to have a reasonable potential to violate water quality standards.

DISCUSSION ITEM 2. GENERAL PERMITS: DRAFT SECTION 1(C).

There have been extensive discussions in the stakeholder process of ways to reconcile general permits with case-specific antidegradation review. The environmental coalition submitted detailed comments on this issue in response to IDEM’s second notice draft rule. We had hoped that the revised draft would respond to these comments and recommendations and include more detail on how IDEM intended to conduct antidegradation review of activities authorized by general permits. Unfortunately, the revised rule simply recites the statutory language at IC 13-18-3-2 rather than provide guidance or clarification for how this statute will be implemented.

In the meeting, we asked how IDEM intended to “complete an antidegradation review” of NPDES general permits as set forth in Sec. 1(c)(1) of the draft rule in order to ensure that there is some individualized review of projects that may lead to significant degradation. As Dave pointed out, a general permit shouldn’t be automatic. Instead, the antidegradation review should lead to conditions in the general permit to ensure that:

1. sufficient information is provided in the applicant’s notice of intent for general permit coverage (NOI) for IDEM to determine the magnitude of the proposed lowering of water quality;
2. there is adequate public notice and access to the information contained in these NOI’s;
3. any water quality lowering resulting from use of the general permit has been determined to either be “insignificant” or “necessary to accommodate important social or economic development in the area of the water”;
4. general permits will not be used if they would have the effect of lowering water quality in OSRWs or ONRWs; and

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5. an individual permit will be required if the project would lead to significant degradation on an individual or cumulative basis.

During the meeting, you indicated that IDEM did not intend to allow the use of general permits to circumvent antidegradation requirements and that the agency will use its existing authority to require individual permits where it appears from the NOI that a proposed discharge may in fact lead to significant degradation of water quality. We recommended that you amend Section 1(c) of the rule to make these commitments explicit rather than implicit. We suggested that, at the very least, you thoroughly explain how general permits will be reviewed and processed as part of your rule submission package to U.S. EPA. A guidance document explaining the process to the regulated community and the public would also be very helpful.

Takeaway:

- Revise Sec. 1(c) to clarify that antidegradation reviews for general permits will meet the conditions outlined above.

DISCUSSION ITEM 3. MERCURY: SECTIONS 3(C) AND 4(A)

In Section 3(c) of the draft rule, mercury, a Bioaccumulative Chemical of Concern (BCC), is singled out and handled like a non-BCC in OSRWs within the Great Lakes basin (which includes the Indiana waters of Lake Michigan). A new or increased loading of mercury that causes a significant lowering of water quality would be allowed in OSRWs within the Great Lakes basin, even though significant loadings of other BCCs to those waters would be prohibited.

Similarly, in draft Section 4(a), mercury is handled like a non-BCC in ONRWs and Great Lakes basin OSRWs. A “short-term” exemption from an antidegradation demonstration would be allowed for mercury in ONRWs and OSRWs, even though the exemption is not provided for other BCCs discharged to those waters.

Because prior drafts of the rule have not handled mercury in this manner, we asked you to justify why significant loadings of mercury should be allowed in ONRWs and Great Lakes basin OSRWs even though significant loadings of other BCCs are not allowed. We asked why a proposal to increase mercury loading as a product of industrial process should not be treated like other BCCs. We pointed out that a mercury variance may be an available option and that the exemption in Section 4(A)(ii) would render “nonsignificant” any new or increased loading resulting from a “change in intake water pollutants not caused by the discharger.”

In response, you suggested that one justification for handling mercury differently than other BCCs may be that POTWs may not be able to control the input of mercury-tainted sewage into the treatment process and thus the POTWs would not be responsible for outputs of mercury in their effluent. You may not have considered whether such a situation is covered by the Section 4(A)(ii) exemption from “significance.” In any event, if IDEM believes a particular situation such as intake of mercury-tainted sewage to POTWs should be exempted from “significance” and handled differently than other BCCs, then IDEM can draft a rule provision

narrowly tailored to that situation and submit the factual justification for the provision in its promulgation package to EPA. The current draft exemptions for mercury are, however, too broad, and to our knowledge have not been justified by data. A blanket free pass for mercury loadings into ONRWs and Great Lakes basin OSRWs is the wrong approach and is unlikely to be approved by EPA.

Takeaway:

- The record does not justify the blanket exemptions for mercury loadings and it is not clear how these exemptions could be approved by EPA.

DISCUSSION ITEM 4. HANDLING OF TRIBUTARIES TO OSRWs: SECTIONS 3(C) AND 6(B)

This discussion was grounded in the notion that when attempting to protect the water quality of a particular water, such as a lake, discharges into upstream tributaries must be considered along with direct discharges into the water because the upstream discharges may lower the water quality downstream. In other words, both direct and indirect discharges to the water must be considered.

This commonsense notion is expressly recognized in two provisions in the current draft rule. Section 3(a)(1)(b)(ii) calls for controls on point and nonpoint sources to ensure that “any designated use of a downstream water is maintained and protected.” Section 3(d)(2)(B) states, “A discharge to a tributary of an ORNW . . . shall not be allowed if it would cause an increase in the ambient concentration of that pollutant in the ORNW.”

Furthermore, the requirements in draft Section 7(a) for water quality improvement projects implicitly incorporates this notion of upstream discharges having downstream effects by applying the requirement when a discharger proposes “to cause a significant lowering of water quality in an OSRW” and for “each activity undertaken that will result in a significant lowering of water quality in an OSRW.” The use of the words “cause” and “result” imply that the discharge that causes or results in the lowering of water quality in the OSRW may be either a discharge directly to the OSRW or a discharge to a tributary that flows into the OSRW.

Throughout the new draft rule, however, previous references to “portions of waters upstream of an OSRW that impact the water quality of the OSRW” have been stricken. You said that this change was justified because now all waters of the state are subject to the same uniform de minimis standard – i.e., no more than 10% of available capacity individually used and 90% of benchmark available capacity cumulatively maintained. But as we pointed out at the meeting, in at least two subsections the reference to upstream waters was stricken even though the subsections are unrelated to the de minimis standard.

First, Section 6(b) provides a public meeting on an antidegradation demonstration if “the proposed discharge is to an OSRW.” The prior draft version of the rule had the following language: “[if] the proposed discharge is to an OSRW or to portions of waters upstream of an OSRW that impact the water quality of the OSRW.” Your concern appears to be that a public meeting should not be held for significant discharges to tributaries of OSRWs unless there is an

associated significant lowering of water quality in the OSRW itself. This subsection could easily incorporate both of our concerns by stating the following:

. . . The commissioner shall hold a public meeting on the antidegradation demonstration in accordance with 327 IAC 5-2-11.2 if:

- (1) the proposed discharge will result in a significant lowering of water quality in an OSRW, irrespective of whether the discharge is directly to the OSRW or to an upstream water that flows into the OSRW.

* * *

Second, Section 3(c)(1) provides, “For OSRWs inside the Great Lakes basin, no new or increased loading of a BCC except mercury shall be allowed that causes a significant lowering of water quality of the OSRW.” The prior draft version had the following language: “(1) For OSRWs inside the Great Lakes basin, as well as the portions of waters upstream of an OSRW that impact the water quality of the OSRW inside the Great Lakes basin, no new or increased loading of a BCC shall be allowed that causes a significant lowering of water quality of the OSRW.” The language of the prior draft clearly and properly incorporated the notion of upstream discharges significantly lowering water quality in the downstream OSRW. Moreover, the prior draft language served your purposes because Section 3(c)(1) would not have prohibited a discharge to a tributary unless that discharge “caused” a significant lowering of water quality of the OSRW itself. By striking the phrase “as well as the portions of waters upstream of an OSRW that impact the water quality of the OSRW inside the Great Lakes basin,” you have unnecessarily narrowed the application of Section 3(c)(1) to new or increased loadings directly into the OSRW and have deleted application of the Section to new or increased loadings in tributaries even if those loadings cause a significant lowering of water quality of the OSRW.

Takeaways:

- Revise Section 6(b) to clarify that a public meeting will be held if a proposed discharge would cause a significant impact to a downstream OSRW.
- Restore the deleted language in Section 3(c) so that the intent of the Tier 2.9 section is not defeated by allowing discharges into tributaries of OSRWs to significantly degrade the OSRWs downstream.

DISCUSSION ITEM 5. SHORT-TERM EXEMPTION: SECTIONS 4(A) AND (B)

During the meeting, we expressed our concern that although the exemptions for “short-term” loadings in Sections 4(a) and (b) are improved from early drafts of the rule, a remaining problem is that there is still no consideration of the magnitude of exempted loadings, particularly the cumulative effect of multiple exempted loadings on the assimilative capacity of the water. We pointed out that EPA views this exemption as requiring both a time component and a magnitude component:

A direct or upstream source that would result in a temporary *and* limited effect on OSRW water quality may be authorized. . . . As a *non-binding* rule of thumb, activities with durations less than one month *and* resulting in less than a 5% change in ambient concentration will be deemed to have temporary and limited effects.

(Emphasis in original).¹

We also pointed out that IDEM's response to this concern, as expressed in IDEM's responses to our 2nd-notice comments, was inadequate because (1) the requirement that "all reasonable methods for minimizing or preventing the new or increased loading must be taken" does not require an assessment of the cumulative effects of the exemption; (b) the requirement that "any short-term, temporary discharge authorized in a NPDES permit will be required to meet any applicable water quality-based effluent limitations" does not address the actual effects of the exemption on assimilative capacity of a waterbody (meeting the WQBEL's is not the issue and can be assumed); and (3) the fact that the referenced EPA guidance from Region VIII "is just a 'non-binding rule of thumb' for facilities in Region VIII" does not negate the importance and wisdom of considering the cumulative magnitude of "short-term" exemptions on assimilative capacity. If IDEM will not provide for an assessment of such effects in the rule, then IDEM should provide in guidance and in the promulgation package to EPA a plan for how IDEM would respond to multiple requests for "short-term" exemptions and how it would consider the cumulative effects of multiple "short-term" impacts.

Finally, we asked how even a temporary discharge of mercury into a waterbody, as allowed under draft Section 4(a), would meet the requirement in Sections 4(a)(4) and 4(b)(4) that the "the discharge will result only in a short-term, temporary (not to exceed twelve (12) months) lowering of water quality," given that mercury bioaccumulates in living tissue and is very persistent in the environment.

Takeaways:

- Revise Section 4(a) and 4(b) to ensure that the *magnitude* of a proposed loading is accounted for as well as its timing when determining whether it qualifies for an exemption from antidegradation review.
- Clarify the circumstances in which discharges of BCCs can be considered to have only "short-term" effects on water quality considering the fact that BCCs bioaccumulate in tissue and are persistent in the environment.

DISCUSSION ITEM 6. PROBLEMS WITH USING PROPOSED EFFLUENT FLOW TO CALCULATE LOADING CAPACITY: SECTION 2(53)

The calculation of total loading capacity, and thus the calculation of available loading capacity, includes the new or increased effluent flow proposed by the antidegradation applicant. We are concerned that in low-flow streams especially, multiple new or increased loadings of a pollutant will be granted de minimis exemptions if the loadings are associated with added effluent flows. We pointed out at the meeting that in the May 15, 2009 comments by EPA on a past draft of the rule, EPA stated that to the extent that this provision effectively allows for an infinite number of "de minimis" increases as long as there is a corresponding flow increase, it

¹ U.S. EPA Region VIII Guidance: Antidegradation Implementation (August 1993), Part IV(D), Page 11.

seems inconsistent with the intent of the Federal regulations at 40 CFR 131.12(a)(2) and 132, Appendix E, I.B. and is likely to be litigated if approved by EPA.

You responded that including the new or increased effluent flow in the calculation of “total loading capacity” is consistent with EPA guidance for calculations on permit limits, and that not doing so produces absurd results.

We then pointed out that a loophole in the draft rule arises if the proposed new or increased effluent flow is used to calculate loading capacity because the applicability of the rule is limited to new or increased “loadings” only, and does not account for “concentration.” We discussed the following scenario. An applicant’s new loading of a pollutant to a low-flow stream is granted a de minimis exemption because the proposed new loading will be accompanied by sufficient new effluent flow that reduces the concentration of the pollutant. Assume that six months later the discharger reduces the proposed amount of effluent flow, for whatever reason. But because Section 1(b) of the draft rule states that the rule’s procedures apply only if a new or increased “loading” occurs,² without regard to a change in the concentration of the pollutant, the antidegradation rule provides no authority to recalculate and reconsider whether the new loading is still de minimis.

Takeaway:

- Amend the applicability Section 1 and the definition of “degradation” in Sec. 2(14) to include increases in loading *or concentration* of a regulated pollutant in order to avoid the loophole of a discharger reducing the assimilative capacity of a waterbody by reducing effluent flow after a de minimis exemption has been granted for a loading.

DISCUSSION ITEM 7. ISSUES OF SPATIAL SCALE IN CALCULATION OF TOTAL, AVAILABLE, AND USED LOADING CAPACITY, BENCHMARK AVAILABLE CAPACITY, AND DE MINIMIS: SECTIONS 2(2), 2(53), AND 4(C)

We argued during the meeting that carefully considering the spatial scale at which loading capacity is calculated is critically important for an accurate determination of the impact of a loading on water quality and to ensure consistency with federal regulations. Yet, as we pointed out, the draft rule does not identify the location at which water quality calculations are to take place.

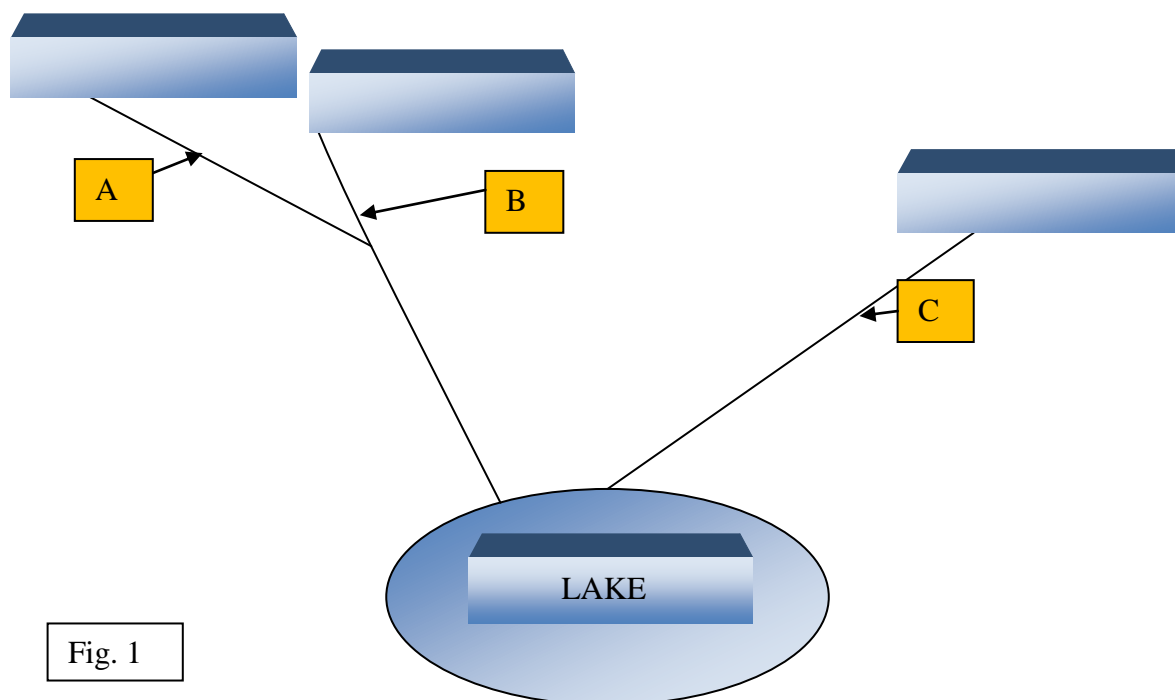
In the draft rule, to be considered de minimis, each individual new or increased loading of a regulated pollutant must use less than or equal to 10% of the “available loading capacity” determined at the time the loading is proposed. Moreover, 90% of the available loading capacity established at the time of the request for the “initial increase” in the loading of the regulated pollutant (i.e., the “benchmark” available capacity) must remain given the proposed loading

² Draft Section 1(b): Except as provided under section 4 of this rule, the antidegradation implementation procedures established by this rule apply to a proposed new or increased loading of a regulated pollutant to a surface water of the state that will result from a deliberate action including a change in process or operation that:

- (1) adds additional regulated pollutants; or
- (2) creates an increase in loading of a regulated pollutant already being discharged.

combined with the other sources of the regulated pollutant (the earliest date on which the benchmark available capacity is determined appears to be the date a new antidegradation rule is approved).

We asked you to consider the river system illustrated in Figure 1 below.



In this hypothetical scenario, three facilities (A–C) discharge pollutant X at various points in the stream system, which flows into a lake. Facility “A” is the first to propose an increased loading of pollutant X along with an increase in effluent flow; then facility “B” proposes an increased loading and lastly facility “C.”

When any facility proposes to increase loading of pollutant X into the stream, the increased loading may use existing assimilative capacity locally in the stream segment as well as system-wide as measured at the inlet to the lake. Both effects are important and neither can be ignored.

On the one hand, unless the used loading capacity, the available loading capacity, and the benchmark available capacity are measured at the downstream point in the water system, the effect of the increased loading on the assimilative capacity of the lake will remain undetermined. Note that the local effect of the loading on the tributary’s assimilative capacity may not reveal the downstream effect on the lake’s assimilative capacity. For example, in Figure 1, after facility “A” uses a portion of the lake’s assimilative capacity, a proposed increased loading by facility “B” or “C” may violate the 90% benchmark capacity at the lake even though the local tributary effect of the loading is de minimis. The effect of a facility’s loading on the lake is especially important if the lake is an OSRW such as Lake Michigan. Draft Section 7 of the rule cannot be

implemented without knowing whether a proposed new or increased loading in a tributary to an OSRW will “cause” a significant lowering of water quality in the OSRW.

Furthermore, the draft rule defines the benchmark available capacity in Section 4(c)(1)(A)(ii) as “ninety percent (90%) of the available loading capacity established at the time of the request for the initial increase in the loading of a regulated pollutant.” If the geographic scale of “initial increase” is the local tributary, each facility will get a new benchmark when it proposes an increased loading of pollutant X, but this scheme defeats the purpose of a cumulative cap. Thus, the geographic scale of “initial increase” must incorporate downstream cumulative effects. You pointed out that an existing Non-rule Policy Document on determining downstream impacts of upstream discharges for the Great Lakes system could be used as a basis for guidance on downstream determinations within and outside of the Great Lakes system.

On the other hand, measuring loading capacity and available capacity only at the downstream point may leave undetermined the local effect of a facility’s proposed loading. A loading may be “significant” at the upstream point even though it is de minimis at the downstream point (because of more flow at the downstream point). If the loading is significant at the local scale of the tributary, the antideg demonstration may require a local evaluation of social and economic conditions. For example, the local tributary into which the facility discharges may contain species of concern, making the local effect on assimilative capacity important. Also, the tier 2 and 2.9 antidegradation standards in draft Section 3 require that the social and economic importance of the proposed project be evaluated “in the area in which the surface waters are located.” Although the phrase “in the area” is not specified, it must be interpreted in light of the geographic area in which the majority of the facility’s workers live and in which the facility contributes to the community tax base. If Figure 1 represents a large watershed, the “area in which the surface waters are located,” with respect to facility “A’s” loading, may be far from the inlet to the lake.

To summarize, if you measure loading capacity in the tributary only, you can repeatedly put new or increased loadings in different tributaries/mixing zones without counting the impact downstream. But if you calculate capacity downstream only, you may not account for significant local impacts in the tributary. You asked what the solution is to this problem of scale, and we responded that, especially for Lake Michigan, the effect of a proposed new or increased loading on assimilative capacity and the determination of its “significance” must be evaluated at both the local upstream area and the cumulative downstream area.

Takeaways:

- Clarify either through rule amendment or a guidance document the method by which IDEM will calculate individual and cumulative impacts in order to ensure that the impacts of de minimis discharges are considered at an appropriate geographic scale.
- Consider using Non-rule Policy Document #1 to ensure that IDEM’s calculation of de minimis discharges appropriately account for impacts to downstream water bodies, especially OSRWs such as Lake Michigan.

DISCUSSION ITEM 8. EXEMPTIONS FROM SOCIAL AND ECONOMIC ANALYSIS FOR ACROSS-WATERSHED AND INTER-MEDIA POLLUTION TRADING: SECTIONS 5(B)(5), 5(B)(1), AND 5(D)(2)

Although various pollutant trading proposals could represent an overall net benefit to the environment, there must be a mechanism for IDEM to distinguish “good” trades from “bad” trades. As we discussed in the meeting and summarized below, the current blanket exemptions for across-watershed and inter-media trades do not allow IDEM or the public to determine whether a specific trading proposal is a good one. The information that would be generated by an antidegradation socioeconomic review is exactly the kind of information that is necessary for IDEM to determine whether a trading proposal is worth pursuing.

Section 5 of the draft rule exempts particular activities from components of the requirement that the applicant demonstrate that a new or increased discharge is necessary to accommodate important economic or social development in the area in which the waters are located. That is, the draft rule exempts particular activities from a full antidegradation demonstration. Although IDEM does not claim that the lowering of water quality associated with these activities are “insignificant,” these exempted activities are subject to only the first component or first two components of the antidegradation demonstration. These exempted activities appeared in prior drafts of the rule as “exemptions” from *any* antidegradation demonstration. In the new draft rule, the specified activities are still exemptions in so far as the activities are exempted from a full demonstration that the proposed lowering of water quality is necessary to accommodate important economic or social development in the area in which the waters are located.

As we have argued in comments on past drafts of the rule, any “exemption” from the full antidegradation demonstration, to be consistent with the perspectives of EPA and the courts, must be associated with at least one of three types of situations: (1) changes in loading result in a de minimis decrease in water quality in the receiving waterbody over the range of likely loadings, including a “temporary” lowering of water quality; (2) the applicant has already submitted the required information and this submittal sufficiently substitutes for the omitted component of the antidegradation demonstration; (3) IDEM presents factual information in the record supporting the assertion that the omitted component of the antidegradation demonstration is satisfied for all of the activities covered under the exemption. If at least one of these criteria is not met, it is not sufficient to require only “some level” of an antidegradation demonstration for activities that result in a significant lowering of water quality. Draft Sections 5(b)(5), 5(b)(1), and 5(d)(2) in particular are inconsistent with the federal regulations because none of the above three criteria have been met.

Draft Sections 5(b)(5) and 5(b)(1) are both intra-watershed pollution trades. At the meeting we pointed out that even if these provisions arose from specific scenarios that IDEM believes create social and economic benefits for the area in which the waters are located, these provisions as written are overly broad and the activities potentially included cannot be justified as a class.

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Draft Section 5(b)(5) allows, without a socioeconomic justification, a significant decrease in water quality to occur at one location of a HUC-10 watershed so long as a decrease in loading at another location in the watershed offsets the increase at the watershed scale. Although the required net decrease in loading at the watershed scale may produce an improvement in water quality at the outlet of the watershed, there is no reason to believe that this trade would accommodate important economic or social development in the area in which the waters are located, as required by the tier 2 and 2.9 standards. Although the phrase “in the area in which the waters are located” is not specified, it must be interpreted in light of the geographic area in which the majority of the facility’s workers live and in which the facility contributes to the community tax base. A HUC-10 watershed is simply too large a geographic scale to assure generally that the community affected by the increased loading will realize a social or economic benefit. What is “beneficial” for the watershed is not necessarily beneficial for the community “in the area in which the waters are located.” A social or economic benefit “in the area” could be assured only if the increased loading occurred in close proximity to the decrease in loading, or generally if the increased loading occurred in close proximity to an improvement in water quality created by the trade. But draft Section 5(b)(5) is not narrowly tailored to those circumstances and would include activities that do not meet that criterion.

As EPA has stated regarding these watershed-scale trading exemptions [designated 327 IAC 2-1.3-4(b)(3)(B) and 327 IAC 2-1.3-4(b)(4)(A) in the previous draft rule],

[These exemptions] contemplate offsetting new or increased discharges with other actions within the same ten digit HUC. Offsetting provisions may be an acceptable basis for determining that antidegradation review is not triggered if it is clear that the offset results in no change in water quality at the point where the new or increased discharge will occur. It is not clear that the spatial relationship between such actions will be such as to ensure that this requirement will be met in all circumstances that would qualify for this exemption. EPA recommends that these exemption provisions for these actions be removed from the antidegradation rule and addressed through the antidegradation review process on a case-by-case basis or provide the data and analysis necessary to satisfy the antidegradation demonstration requirement for all the activities that might fall under one of these exemptions.

LSA Document #08-764 RTC Second Comment Period, page 7. IDEM’s response to EPA’s above comment was nonresponsive because requiring “some level of an antidegradation demonstration” – i.e., the alternatives analysis of draft Section 5(c) – does not solve the problems with these exemptions, and EPA was not referring to Section 4 of the “revised draft” we are now discussing. As we pointed out at the meeting, good pollution trades cannot be distinguished from bad trades without the information from the socioeconomic analysis component of the antidegradation demonstration.

Draft Section 5(b)(1) also describes pollution trades across a HUC-10 watershed. At the meeting you discussed a specific scenario covered by this exemption for which you believed the socioeconomic information in the antidegradation demonstration has already been submitted as part of the permitting process. But it appears that Section 5(b)(1) is not narrowly tailored to that specific scenario you mentioned, and instead appears designed as a catch-all for various

activities, some of which may not be justified by existing information on socioeconomic importance.

Finally, draft Section 5(d)(2) allows, without a socioeconomic justification, a significant decrease in water quality to occur if the new or increased loading is necessary to accomplish a reduction in the release of one or more air pollutants, and if the reduction in the loading of the air pollutant will substantially reduce human exposure to an air pollutant subject to state or federal air quality standards. Air pollutants subject to federal national ambient air quality standards are carbon monoxide, sulfur dioxide, ozone, lead, nitrogen dioxide, and particulate matter. This exemption thus assumes a “significant” lowering of water quality will always create a social or economic benefit if there is a corresponding “significant” reduction in one of those air pollutants, irrespective of the fact that Indiana is in compliance with the air standards for those pollutants. You did not refer us to any factual information, nor are we aware of any, that would justify that assumption. How can we assume that a further reduction in an air pollutant that already meets air quality standards provides an incremental benefit sufficient to outweigh a significant reduction in water quality? As with draft Sections 5(b)(5) and 5(b)(1), this exemption describes activities that require a full demonstration of economic or social importance on a case-by-case basis in order to distinguish good from bad pollution trades.

Takeaway:

- Eliminate exemptions 5(b)(5), 5(b)(1), and 5(d)(2) in order to ensure that trading proposals are appropriately evaluated for their overall socioeconomic benefit before being approved.

DISCUSSION ITEM 9. BADCT: SECTION 5(E)

IDEM has been proposing the use of a technology-based treatment limit as a way to expedite and simplify a full evaluation of technology alternatives since the beginning of this rulemaking process. The theory is that there would be no need to conduct a rigorous professional evaluation of different treatment options if the applicant simply selects effluent limits based on the best treatment technology commonly available. Although we do not dispute this in theory, we have had several concerns about how this would be implemented in practice.

One concern is that the BADCT option not be used to replace a full consideration of whether or not degradation is “necessary” in the first place. In other words, an applicant should not proceed to the choice of treatment options until he or she has first ruled out the feasibility of nondegradation and mitigation techniques or alternatives. In our meeting, you clarified that the rule has been modified to require this demonstration of “necessity” in Section 5(c) before the treatment alternatives (and BADCT option) are considered in Section 5(e). We welcome this revision and note that it does indeed appear to satisfy this concern.

Another concern we discussed at our meeting was that there needs to be some process in place to regularly review and update BADCT limits to ensure that the limits continue to reflect the best control technology available as treatment technology continues to improve. We understand that IDEM intends to address this in guidance or in the rule submissions to EPA.

Summary of June 9, 2011 Antidegradation Meeting with Environmental Coalition

Although we did not discuss this point during our meeting, we continue to believe that it is important to set a BADCT limit for phosphorus discharges from POTWs, especially now that the definition of “regulated pollutant” now explicitly includes nutrients. We note that POTWs discharging in the Great Lakes Basin (including Indiana POTWs) have been meeting a limit of 1.0 mg/L phosphorus for decades and more stringent limits are certainly technically feasible.

Takeaways:

- Clarify the process that IDEM will use to ensure that BADCT limits are regularly reviewed and updated as necessarily to keep up with technological innovation.
- Clarify the process that IDEM will use to ensure that BADCT limits are set for an appropriate range of pollutants, including phosphorus.